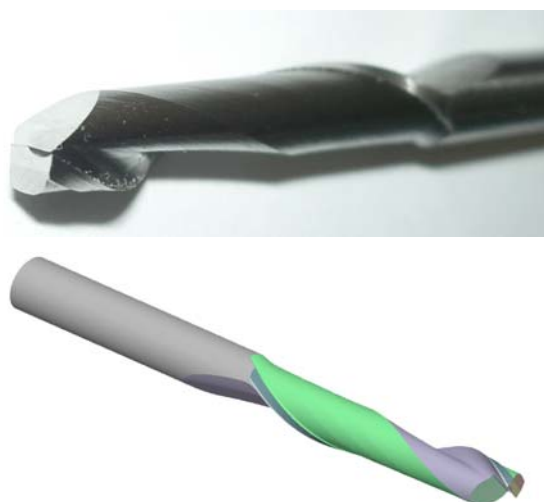



















Endmill Ø6 Z1

A1-010

The design of OD- and Fluteoperations of single fluted Endmills are special. The flute needs to be as deep as necessary and the form as round as possible. The OD needs to clear the cutting edge, but not reduce the rigidity of the tool. Ground with a 1A1 wheel with additional rotation when reaching the end of the cutting edge, the OD form is smooth without distinct edge between OD and Flute.



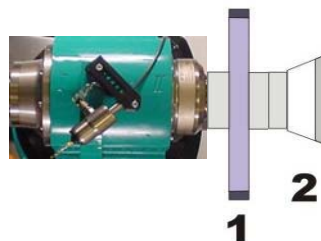
1. Cycletime for Production

Tool specifications Diameter 6 mm, Z 1, Length of cutting edge 32 mm, Helix angle 30° Material HSS									
Operations									
Feed [mm/Min]	2000	100	70	250	200	300	70	120	120
Power [kW]		4	2	1	1	1	1	1	1
Cutting feed [m/s]		32	32	32	32	32	32	32	32
Used wheels									
Grinding time [s]	16	61	10	60	19	15	12	10	10
Total cycle time	3 Min 34								

The mentioned cycle times are indicative. The material to be ground, different grinding wheels or other coolants can influence the cycle times considerably.

2. Used Grinding Wheels

- 1 Ø125 1A1 B126
- 2 Ø75 11V9 B126



3. Machine and Software Requirements

Machine: 5 axes CNC grinder : NORMA CFG
Control: Fanuc 31i
Coolant: Synthetic Oil, pressure 6 - 7 bar
Software: Quinto 5

responsible engineer: OP, 24.4.07

www.schneeberger.ch

J. SCHNEEBERGER Maschinen AG 4914 Roggwil Switzerland
Subsidiaries in: France, Deutschland, Italia, United States, China

TECHNOLOGY
FOR TOOLING